

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

Listing of Claims:

1. (Currently Amended) A network comprising:
 - an internal secured portion comprising a virtual private network certificate authority;
 - an external portion;
 - at least one mobile node in the external portion;
 - at least a first gateway; and
 - at least a second gateway, where the internal secured portion connects via the first gateway and the second gateway to the external portion, and
 - the network is configured to change a ~~the~~ gateway, which the mobile node uses to communicate with the internal secured portion, from the first gateway to the second gateway in response to movement of the mobile node and in response to a receipt from the mobile node of a new care-of-address that is different from a first care-of-address.
2. (Currently Amended) A network as claimed in claim 1, further configured to transfer context information usable by the at least first gateway ~~a gateway~~ in communications with the mobile node, to the second gateway.
3. (Previously Presented) A network as claimed in claim 2, wherein the context information includes an identifier of the mobile node.
4. (Previously Presented) A network as claimed in claim 3 wherein the identifier is a home address of the mobile node.
5. (Previously Presented) A network as claimed in claim 2, wherein the context information includes material for defining secure communication means by which information is transferable securely between the mobile node in the external portion of the network and the internal secured

portion of the network, via the second gateway.

6. (Previously Presented) A network as claimed in claim 5, wherein the secure communication means is a security association pair between the second gateway and the mobile node.

7. (Previously Presented) A network as claimed in claim 2, wherein the context information is transferred from a location that is physically separate from the first gateway.

8. (Previously Presented) A network as claimed in claim 2, further configured to transfer information to the mobile node for enabling communications between the mobile node and the second gateway.

9. (Previously Presented) A network as claimed in claim 8 wherein the information transferred to the mobile node enables secure communication means by which information is transferable securely between the mobile node in the external portion of the network and the internal secured portion of the network, via the second gateway.

10. (Previously Presented) A network as claimed in claim 9, wherein the secure communication means is a security association pair between the mobile node and the second gateway.

11. (Previously Presented) A network as claimed in claim 8, wherein the information transferred to the mobile node comprises an address of the second gateway.

12. (Previously Presented) A network as claimed in claim 8, wherein the information transferred to the mobile node is transferred between the first gateway and the mobile workstation using an existing security association between the mobile node and the first gateway.

13. (Previously Presented) A network as claimed in claim 1 wherein the second gateway comprises one or more databases which are updated to enable the internal secured portion of the network and the mobile node in the external portion of the network to communicate via the second gateway.

14. (Previously Presented) A network as claimed in claim 13, wherein the one or more databases are a security policy database and a security association database.

15. (Previously Presented) A network as claimed in claim 1 wherein the mobile node comprises one or more databases which are updated to enable the internal secured portion of the network and the mobile node in the external portion of the network to communicate via the second gateway.

16. (Previously Presented) A network as claimed in claim 15, wherein the one or more databases are a security policy database and a security association database.

17. (Currently Amended) A network as claimed in claim 1 further configured to detect a present location of the mobile node and change the gateway ~~initiate a change in the gateway~~ through which the mobile node communicates with the internal secured portion of the network, from the first gateway to a better gateway.

18. (Previously Presented) A network as claimed in claim 17, wherein the better gateway is better because it is either closer to the mobile node or it is optimal for routing existing sessions.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Currently Amended) A network as claimed in claim 17, further configured to detect a present location via a location detection means ~~from a source~~ that is separate from the first gateway.

23. (Currently Amended) A network as claimed in claim 22, further configured to transfer

information via transfer means ~~from a source that is~~ physically separate from the first gateway and wherein the transfer means and the location detection means ~~the source to transfer information and the source to detect a present location~~ are housed together.

24. (Previously Presented) A network as claimed in claim 1 wherein the first gateway and the second gateway are in distinct physically separated segments of the network.

25. (Previously Presented) A network as claimed in claim 1, wherein the mobile node communicates with the internal secured portion of the network via the first gateway and also via the second gateway simultaneously for a transition period, before communicating via the second gateway only.

26. (Previously Presented) A network as claimed in claim 1 wherein the mobile node is involved in a session with a correspondent node.

27. (Previously Presented) A network as claimed in claim 26, wherein the correspondent node is located in the internal secured portion of the network and the mobile node is located in the external portion of the network.

28. (Currently Amended) A method comprising:

determining when a first serving gateway, through which a mobile node communicates from an external portion of a network with an internal secured portion of the network, is sub-optimal;

identifying a second gateway; and

in response to the mobile node moving and sending a new care-of-address that is different from a first care-of-address to the first serving gateway, transferring the gateway through which the mobile node communicates with the internal portion of the network from the first serving gateway to the second gateway, wherein the internal secured portion comprises a private virtual network certificate authority.

29. (Currently Amended) A mobile node comprising:

means for receiving ~~configured to receive~~, via a first secure communication means, an identifier of a second gateway; and

means for changing ~~and further configured to change~~ from communicating with an ~~the~~ internal secured portion of the network through the first gateway to communicating via the second gateway, in response to moving and sending a new care-of-address that is different from a first care-of-address to the first gateway, wherein the internal secured portion comprises a private virtual network certificate authority.

30. (Currently Amended) The network as claimed in claim 23, further comprising means ~~configured~~ for using a first secure communication means by which information is transferable securely between the internal secured portion of the network and the mobile node via the first gateway, to receive an identifier of the second gateway.

31. (Currently Amended) The network as claimed in claim 23, further comprising means ~~configured~~ for using a second secure communication means to transfer information securely between the internal secured portion of the network and the mobile node via the second gateway.

32. (Currently Amended) A method comprising:

moving in an external portion of a network, where the network comprises an internal secured portion, the external portion, at least a first gateway, and at least a second gateway;

obtaining a location identifier, where the location identifier comprises a new care-of-address different from a first care-of-address;

sending the new care-of-address to the first gateway; and

in response to receiving an acknowledgement from the second gateway, communicating via the second gateway, wherein the internal secured portion comprises a private virtual network certificate authority.

33. (Currently Amended) A method comprising:

receiving a new care-of-address that is different from a first care-of-address by ~~from~~ a mobile node that has moved in a network; and

updating a location database in order to change an identification of a the first gateway to an identification of a second gateway that the mobile node uses to communicate from an external portion of the network to an internal secured portion of the network, wherein the internal secured portion comprises a private virtual network certificate authority.

34. (Currently Amended) An apparatus comprising ~~configured to~~:

means for receiving ~~receive~~ a new care-of-address that is different from a first care-of-address by ~~from~~ a mobile node that has moved in a network; and

means for updating ~~update~~ a location database in order to change an identification of a the first gateway to an identification of a second gateway that the mobile node uses to communicate from an external portion of the network to an internal secured portion of the network, wherein the internal secured portion comprises a private virtual network certificate authority.

35. (New) A network as claimed in claim 1 wherein the network is a virtual private network.

36. (New) A virtual private network certificate authority, comprising:

means for forming first and second security associations with a mobile node;

means for updating a location database; and

means for forming first and second security associations with a gateway node.